

REMARKS

This Amendment is in response to the final Office Action mailed on May 11, 2010. Claim 1 is amended and is supported, for example, in the specification page 5, lines 33-36 and page 6, lines 2-3. No new matter is added. Claims 1-3 and 5-10 are pending.

§102 Rejections:

Claims 1-3, 5, 6, 8 and 10 are rejected as being anticipated by Kim (US Patent No. 5, 987,904). This rejection is traversed.

Claim 1 is directed to a cooling device that requires, among other features, that the fan is disposed on a side of the cooler relative to the partition, and the partition in front of the fan has an aperture formed in a flat sheet portion. Claim 1 also recites that the perimeter of the fan is not surrounded by a cylindrical component, and an open space is formed outside the fan in the radial direction.

Kim does not disclose or suggest these features. The rejection includes an annotated Figure A to reference certain elements not identified in Kim. For clarity, Applicant has provided a further annotated Figure A on page 4 of this Response that specifies further elements not identified in Kim or the annotated Figure A provided in the rejection.

As shown in Figure A of Kim, the fan 20 is disposed in an aperture I formed in the partition M. Also, a cylindrical component is provided along the edge of the aperture I. Thus, Kim does not disclose or suggest that the perimeter of the fan is not surrounded by a cylindrical component, and an open space is formed outside the fan in the radial direction, as recited in claim 1.

Also, it would not be obvious to one skilled in the art to modify Kim to obtain the above features of claim 1. An advantage of the above features of claim 1 is that the open spaces are formed in front of and outside the fan in the radial direction to allow air to flow in various directions. As a result, the rotation of the fan causes a difference in pressure between the center and the perimeter of the fan, resulting in a discharged flow in one direction and a sucked flow in an opposite direction being generated and causing air turbulence inside the aperture.

In contrast, Kim teaches a configuration in which a single direction laminar air flow is generated in the cylindrical component due to the rotation of the fan. Thus, turbulence caused by simultaneously generating a discharged flow in one direction and a sucked flow in an opposite direction can be avoided in the aperture I and the aperture D. Nowhere does Kim contemplate creating a turbulence within the aperture I or the aperture D. Thus, it would not be obvious to one skilled in the art to modify the structural configuration of Kim to obtain the features of claim 1 based on the teachings of Kim.

For at least these reasons claim 1 is not suggested by Kim and should be allowed. Claims 2, 3, 5, 6, 8 and 10 depend from claim 1 and should be allowed for at least the same reasons.

§103 Rejections:

Claims 7 and 9 are rejected as being unpatentable over Kim in view of Howe (US Patent No. 4,420,679). This rejection is traversed. Claims 7 and 9 depend from claim 1 and should be allowed for at least the same reasons. Applicants do not concede the correctness of this rejection.

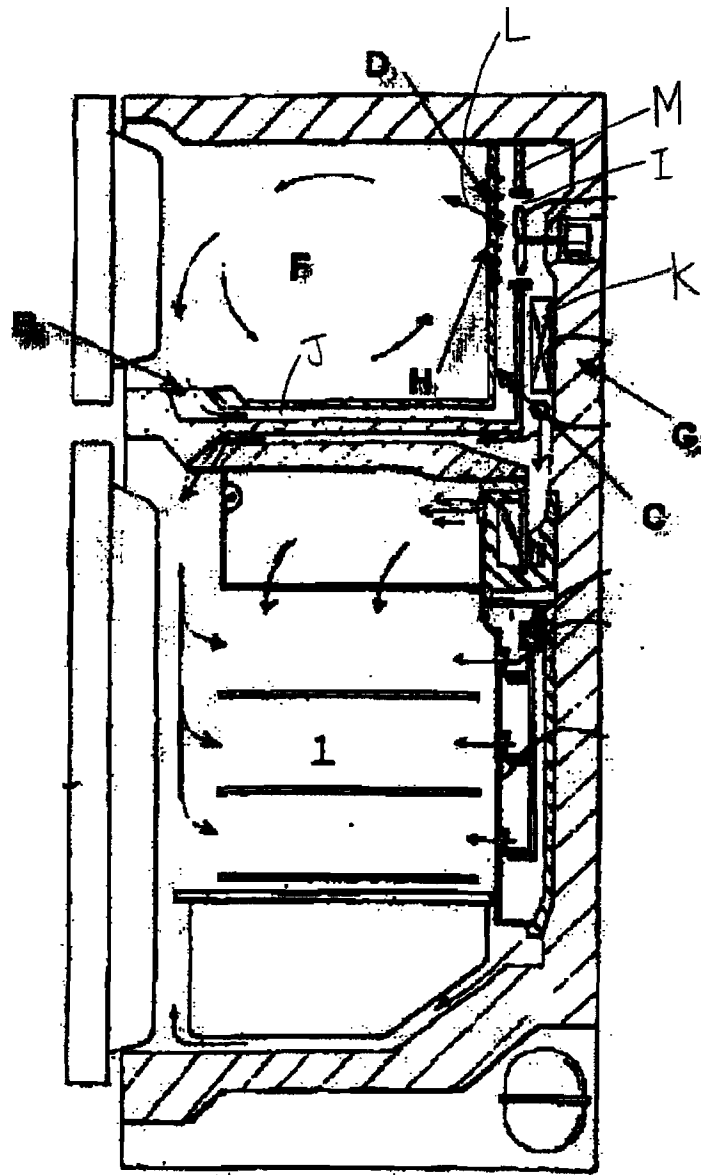
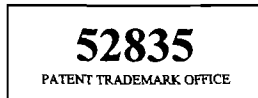


FIG. A

Conclusion:

Applicants respectfully assert that the pending claims are in condition for allowance. If a telephone conference would be helpful in resolving any issues concerning this communication, please contact Applicants' primary attorney-of record, Douglas P. Mueller (Reg. No. 30,300), at (612) 455-3804.



Dated: August 6, 2010

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